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STRICTLY CONFIDENTIAL.

No 10

ELECTRICAL & MECHANICAL DATA
AND
CONTOUR TABLES
OF THE
COMMERCIAL PACIFIC CABLE COMPANY'S
CABLES.

Geo. G. Wanda

TK
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MHT

Commercial Pacific Cable Company

ELECTRICAL & MECHANICAL DATA

AND

CONTOUR TABLES

OF THE

COMMERCIAL PACIFIC CABLE COMPANY'S
CABLES.

1907.

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Electrical Data of Cables

showing

Lengths, Speeds, &c.

ELECTRICAL

Section.	Core.	Length of Cable (nauts).	Total C.R. at Sea Temp.	Total I.C. at Sea Temp.	Ratio $\frac{R}{C}$
SAN FRANCISCO-HONOLULU	500/315	2,276.3	5,047	893.5	5.65
HONOLULU-MIDWAY	220/190	1,332.0	6,523	467.2	13.90
MIDWAY-GUAM	600/340	2,606.8	4,759	1,088.6	4.37
GUAM-MANILA	250/200	1,631.6	7,240	582.6	12.43
MANILA-SHANGHAI	200/180	1,264.4	7,255	434.4	16.7
GUAM-BONIN	200/180	899.1	5,004	334.0	14.98

DATA.

K.R.	Estimated Practical Working Speed.					
	Simplex L.P.M.	Duplex L.P.M.				
4.51	140	120				
3.05	185	160				
5.18	120	105				
4.22	145	125				
3.15	180	155				
1.67	300	250				

Mechanical Data of Cables

shewing

Weights, Sheathing, &c.

Type.	WEIGHT PER NAUT (Cwts.) (Dry.)													
	2 Outer Services	Tar on 2 Outer Services.	2 Compos.	Wire.	Tar on Wire.	Inter-mediate Service.	Tar on Inter-mediate Service.	Wire.	Tar on Wire.	Core Service.	Stearine Tape.	Brass Tape.	Core.	Total.
A ²	6.467	4.484	16.767	211.469	1.685	...	...	...	6 Wormings 3.152	12.446	.701	2 2.446	2 8.859 5.598	274.074
E ²	4.891	3.533	11.630	140.137	.897	...	...	...	6 Wormings 3.858	6.242	.606	2 2.214	2 6.210 4.620	184.838
G ²	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Land line	...	...	...	...	...	...	...	...	...	...	...	...	...	...
E	4.158	3.451	9.239	114.580	.842	...	...	...	...	4.022	.380	1.263	4.402 2.799	145.136
B	3.804	4.131	5.842	71.658	1.059	...	...	...	...	2.309	.408	1.250	4.402 2.771	97.634
B'	3.533	2.581	5.901	47.568	.339	...	...	...	...	2.052	.386	1.209	4.457 2.784	70.810
D'	2.936	...	1.942	17.963	2.938	...	...	...	...	1.749	...	...	4.460 2.769	34.757

MECHANICAL DATA.

SAN FRANCISCO—HONOLULU SECTION.

Type.	Sheathing.	Core.	Wormings.	Lay of Cores (inches).	Breaking Strain of Cable (cwt.)	Elongation of Cable %	Core Service.	Outer Service.	Lay of Wire (inches).	Lay of Outer Service (inches).	WIRE TESTS.						DIAMETERS.					WEIGHT OF CABLE PER NAUT. (Cwts.)			WEIGHT PER NAUT (Cwts.) (Dry.)													
											Diameter (inches).	Breaking Strain (lbs.)	Elongation %	Wraps or Twists in 6".	Breaking Strain per sq. in. (tons)	No. of Samples.	Conductor.	Core.	Served Core.	Over Wire.	Complete Cable.	WEIGHT OF CABLE PER NAUT. (Cwts.)			2 Outer Services	Tar on 2 Outer Services.	2 Compos.	Wire.	Tar on Wire.	Intermediate Service.	Tar on Intermediate Service.	Wire.	Tar on Wire.	Core Service.	Stearine Tape.	Brass Tape.	Core.	Total.
																						Air.	Water.	Shipping.														
A ²	16/1 yarn	2 500/315 Bt.	{ 2 13/71 } { 4 8/35 }	14-25	...	...	20 20 1/180 15	24 3/25 21	21-0	4-5 4-0	2985	4,533	...	11-8	29-7	43	18-01	4218	1-279	1-932	2-235	288-91	200-71	292-61	6-467	4-484	16-767	211-469	1-685	...	...	...	6 Wormings 3-152	12-446	2 701	2-446	2 8-859 5-598	274-074
E ²	15/3 yarn	2 350/250 Bt.	{ 2 13/71 } { 4 8/35 }	14-0	...	...	24 18 1/120	21 3/25 18	15-6	4-4 4-6	2519	3,200	20-0	13-7	29-6	20	1521	3789	1-235	1-532	1-777	191-85	133-97	197-69	4-891	3-533	11-630	140-137	897	...	...	...	6 Wormings 3-858	6-242	2 606	2-214	2 6-210 4-620	184-838
G ²	6'00 15/3	2 350/250 Bt.	{ 2 13/71 } { 4 8/35 }	14-0	...	...	Over 3's 21 3-25 18	...	2-5	...	3774	4,986	...	13-9	19-9	20	1521	3789	(A for G) 1-777	...	2-412	530-44	426-54	531-59	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Land line	30/10 yarn	2 500/315 Bt.	{ 2 13/71 } { 4 8/35 }	14-25	...	...	21 18 1/120	21 3/25 21	17-0	3-9 6-5	1284	874	16-3	21-0	32-1	5	1801	4218	1-172	1-422	1-769	Dry weight calculated. 130-80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
E	10/2 yarn	500/315 Bt.	...	...	...	...	15 14 1/106	20 3/25 18	13-3	4-5 4-5	2786	3,880	21-1	13-1	29-2	55	1801	4218	815	1-189	1-373	147-74	107-61	150-44	4-158	3-451	9-239	114-580	842	...	...	...	...	4-022	880	1-263	4-402 2-799	145-136
B	12/6 yarn	500/315 Bt.	...	...	...	...	11 1/180	24 3/25 16	12-0	3-8 3-9	2000	2,299	19-3	14-5	34-0	105	1801	4218	679	997	1-282	99-67	69-46	102-07	3-804	4-131	5-842	71-658	1-059	...	...	...	...	2-309	408	1-250	4-402 2-771	97-634
B'	15/9 yarn	500/315 Bt.	...	...	...	...	13 1/120	17 3/25 16	11-25	3-9 4-0	1464	1,313	18-0	21-2	36-8	76	1801	4218	621	892	1-091	72-36	48-42	74-59	3-533	2-581	5-901	47-568	339	...	...	...	...	2-052	386	1-209	4-457 2-784	70-810
D'	18/14 ^T E.W.T.	500/315 Plain	...	...	186-2	9-2	12 1/120	2 Tapes	12-54	...	9824	1,128	8-2	3 x 3	101-7	1,732	1801	4218	598	796	936	36-26	20-69	37-28	2-936	...	1-942	17-963	2-938	...	...	...	...	1-749	...	...	4-460 2-769	34-757

Type.	WEIGHT PER NAUT (Cwts.) (Dry.)													
	2 Outer Services	Tar on 2 Outer Services.	2 Compos.	Wire.	Tar on Wire.	Inter-mediate Service.	Tar on Inter-mediate Service.	Wire.	Tar on Wire.	Core Service.	Stearine Tape.	Brass Tape.	Core.	Total.
A	9.473	4.866	14.134	1's 185.245	1's 1.228	9.679	6.910	6's 59.045	6's .169	2.228	.187	.844	$\frac{2.027}{1.732}$	297.767
E ²	6.295	4.473	11.082	146.571	.447	...	...	...	Wormings 1.580	2 9.571	2 .304	2 1.634	$\frac{2}{4.125}$ 3.384	189.466
G ²	...	...	...	...	...	...	...	...	...	...	...	...	...	...
E	7.134	4.152	6.477	113.321	.438	...	...	...	...	4.580	.152	.897	$\frac{2.031}{1.692}$	140.874
B	3.509	2.973	5.232	57.791	.173	...	...	...	...	2.250	.157	.812	$\frac{2.018}{1.696}$	76.611
B ¹	2.857	3.223	4.835	39.625	.169	...	...	...	...	1.826	.187	.768	$\frac{2.045}{1.710}$	57.245
D ¹	3.844	...	2.970	16.051	1.206	...	...	...	...	1.850	...	...	$\frac{2.046}{1.710}$	29.677

MECHANICAL DATA.

HONOLULU—MIDWAY SECTION.

Type.	Sheathing.	Core.	Wormings.	Lay of Cores (inches).	Breaking Strain of Cable (cwts.)	Elongn. of Cable %	Core Service.	Outer Service.	Lay of Wire (inches).	Lay of Outer Service (inches).	WIRE TESTS.						DIAMETERS.					WEIGHT OF CABLE PER NAUT. (Cwts.)			WEIGHT PER NAUT (Cwts.) (Dry.)														
											Diameter (inches).	Breaking Strain (lbs.)	Elongn. %	Wraps or Twists in 6".	Breaking Strain per sq. in. (tons)	No. of Samples.	Conductor.	Core.	Served Core.	Over Wire.	Complete Cable.	Air.	Water.	Shipping.	2 Outer Services	Tar on 2 Outer Services.	2 Compos.	Wire.	Tar on Wire.	Inter-mediate Service.	Tar on Inter-mediate Service.	Wire.	Tar on Wire.	Core Service.	Stearine Tape.	Brass Tape.	Core.	Total.	
A	14/1 10/6 yarn	220 190 Ct. Bt.	...	...	...	...	18 14 1/180	30 30 4/28 3/28	18-0	8-0 8-0	2992	4,583	...	11-0	29-9	90	1122	3215	B/A 1359	1804	2156	299-94	222-75	310-25	9-473	4866	14134	1's 185-245	1's 1-228	9-679	6 910	6's 59-045	6's 169	2-228	187	844	2-027 1-732	297-767	
E ²	15/3 yarn	2 220 190 Ct. Bt.	1 4/180	9-0	...	...	16 14 1/180	34 30 1/50	15-75	7-0 7-0	2575	3,302	15-7	13-7	29-18	30	1122	3215	1192	1588	1922	199-97	138-64	208-11	6-295	4-473	11-082	146-571	447	...	...	...	Wormings 1580	2 9-571	2 304	2 1-634	2 4-125 3-384	189-466	
G ²	6/00 15/3 yarn	2 220 190 Ct. Bt.	1 4/180	9-0	...	...	16 14 1/180	...	2-7	...	...	...	...	...	...	...	1122	3215	E ² 1922	...	2546	...	...	Calculated 541-900	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
E	10/2 yarn	220 190 Ct. Bt.	...	...	...	...	12 8 1/120	30 28 1/75	15-0	7-0 6-5	2797	4,130	16-6	11-7	30-9	30	1122	3215	812	1250	1531	143-75	104-72	151-39	7-134	4-152	6-477	113-321	438	...	...	...	...	4-580	152	897	2-031 1-692	140-874	
B	10/6 yarn	220 190 Ct. Bt.	...	...	...	...	9 8 1/120 3 1/180	28 16 1/50	12-0	5-5 5-5	1985	2,174	15-6	16-3	32-7	53	1122	3215	562	914	1156	77-96	55-05	80-12	3-509	2-973	5-232	57-791	173	...	...	...	...	2-250	157	812	2-018 1-696	76-611	
B ¹	12/9 yarn	220 190 Ct. Bt.	...	...	...	...	11 1/120	26 24 1/50	12-0	5-5 5-7	1486	1,231	16-5	22-5	33-5	30	1122	3215	543	802	1026	58-00	38-97	60-50	2-857	3-223	4-835	39-625	169	...	...	...	...	1-826	187	768	2-045 1-710	57-245	
D ¹	16/14T E.W.T.	220 190 Ct. Plain	...	...	138	2-5	11 1/120	2 Tapes	10-3	...	0826	1,066	7-4	3 x 3	95-6	2,640	1122	3215	536	702	891	31-32	17-6	32-37	3-844	...	2-970	16-051	1-206	...	...	...	...	1-850	...	...	2-046 1-710	29-677	

Type.	WEIGHT PER NAUT (Cwts.) (Dry.)													
	2 Outer Services	Tar on 2 Outer Services.	2 Compos.	Wire.	Tar on Wire.	Inter-mediate Service.	Tar on Inter-mediate Service.	Wire.	Tar on Wire.	Core Service.	Stearine Tape.	Brass Tape.	Core.	Total.
A	9.473	4.866	18.281	1's 185.433	1's 1.442	3,598	Tar 2.214 Compos. 4.313	6's 71.067	6's .384	1.849	.245	1.179	$\frac{5.384}{3.000}$	312.728
E	5.515	4.032	9.322	115.280	.247	...	...	...	...	4.183	.211	1.134	$\frac{5.384}{3.098}$	148.406
B	3.875	1.884	7.817	71.322	.227	...	...	...	...	2.125	.312	1.089	$\frac{5.361}{2.965}$	96.977
D'	4.659	...	2.941	18.070	1.223	...	...	...	...	1.947	...	...	$\frac{5.444}{3.164}$	37.448
AA ²	5.527	3.027	10.383	1's 188.861	1's 1.313	1.982	.723	72.295	.375	*3.348 †1.594	(2) .691	(2) 1.661	$\frac{(2)}{3.647}$ 3.264	298.691
E	5.491	2.625	5.794	113.263	.861	...	...	...	...	3.268	.406	.973	$\frac{1.844}{1.612}$	136.137
B	3.976	1.917	5.649	58.732	.792	...	...	...	...	1.768	.351	.902	$\frac{1.818}{1.628}$	77.532
D'	3.363	...	1.500	15.384	2.243	...	...	...	...	1.442	...	...	$\frac{1.826}{1.573}$	27.331

* Core Service.

† Wormings.

MECHANICAL DATA.

GUAM—MIDWAY SECTION.

13

Type.	Sheathing.	Core.	Wormings.	Lay of Cores (inches).	Breaking Strain of Cable (cwt.s.)	Elongh. of Cable %	Core Service.	Outer Service.	Lay of Wire (inches).	Lay of Outer Service (inches).	WIRE TESTS.					DIAMETERS.					WEIGHT OF CABLE PER NAUT. (Cwts.)			WEIGHT PER NAUT (Cwts.) (Dry.)														
											Diameter (inches).	Breaking Strain (lbs.)	Elonga. %	Wraps or Twists in 6".	Breaking Strain per sq. in. (tons)	No. of Samples.	Conductor.	Core.	Served Core.	Over Wire.	Complete Cable.	Air.	Water.	Shipping.	2 Outer Services	Tar on 2 Outer Services.	2 Compos.	Wire.	Tar on Wire.	Inter-mediate Service.	Tar on Inter-mediate Service.	Wire.	Tar on Wire.	Core Service.	Stearine Tape.	Brass Tape.	Core.	Total.
A	14/1 12/6 yarn	600 340 Ct. Bt.	...	...	...	...	Intermediate Over 6's 30 1/50 28 3/28 2 Compos.	30 4/28 30 3/28	18-0	8-0 7-5	2992	4,583	...	11-0	29-9	90	1830	4478	1257	1786	2130	310-00	236-75	318-31	9-473	4-866	18-281	1's 185-433	1's 1-442	3,598	Tar 2-214 Compos. 4-313	6's 71-067	6's 384	1-849	245	1-179	5-384 3-000	312-728
E	10/2 yarn	600 340 Ct. Bt.	...	...	...	...	15 1/120	30 1/75 28	15-0	7-0 7-0	2797	4,130	16-6	11-7	30-9	30	1830	4478	812	1250	1531	153-30	111-63	158-29	5-515	4-032	9-322	115-280	247	...	...	...	...	4-183	211	1-134	5-384 3-098	148-406
B	12/6 yarn	600 340 Ct. Bt.	...	...	...	...	12 1/120	30 1/50 28	13-0	5-5 5-0	1985	2,174	15-6	16-3	32-7	53	1830	4478	656	1023	1257	97-93	70-24	100-04	3-875	1-884	7-817	71-322	227	...	...	...	...	2-125	312	1-089	5-361 2-965	96-977
D'	18/14 ⁺ E.W.T.	600 340 Ct.	...	...	166-5	3-4	12 1/120	2 Tapes	11-92	...	0826	1,066	7-4	3 x 3	95-6	2,640	1830	4478	630	797	1002	39-28	22-81	40-47	4-659	...	2-941	18-070	1-223	...	...	...	...	1-947	...	...	5-444 3-164	37-448

GUAM—BONIN SECTION.

AA ²	14/1 18/8 yarn	2 200 180 Bt.	each 4 1/140 laid up	10-75	...	...	15 1/115	Over 1's 26 1/57 Over 8's 32 1/35	1's 16-0 8's 15-5	3-5	2997	4,716	...	14-3	30-7	1's 40 8's 20	}	1152	3137	905	1's 1-777	1-958	298-97	235-80	306-90	5-527	3-027	10-383	1's 188-861	1's 1-313	1-982	723	72-295	375	*3-348 †1-594	(2) 691	(2) 1-661	(2) 3-647 3-264	298-691
E	10/2 yarn	200 180 Bt.	...	...	...	...	12 1/85 17 1/43 14	30 1/57 26	14-5" 4-75	2799	4,004	15-4	14-9	29-9	25	1152		3137	741	1-208	1-440	139-00	103-75	142-20	5-491	2-625	5-794	113-263	861	...	...	...	...	3-268	406	973	1-844 1-612	136-137	
B	10/6 yarn	200 180 Bt.	...	...	...	...	12 1/85	26 1/57 24	11-0 3-5 3-75	1997	2,203	14-6	19-9	32-7	60	1152		3137	542	882	1-130	78-26	56-09	80-25	3-976	1-917	5-649	58-732	792	...	...	...	...	1-768	351	902	1-818 1-628	77-532	
D'	15/14 ⁺ E.W.T.	200 180	...	...	145-0	5-15	12 1/85	2 Tapes	10-5	...	0832	1,094	5-8	3 x 3	96-7	475		1152	3137	501	668	842	28-63	16-87	29-71	3-363	...	1-500	15-384	2-243	...	...	...	...	1-442	...	...	1-826 1-573	27-331

* Core Service. † Wormings.

Type.	WEIGHT PER NAUT (Cwts.) (Dry.)													
	2 Outer Services	Tar on 2 Outer Services.	2 Compos.	Wire.	Tar on Wire.	Inter-mediate Service.	Tar on Inter-mediate Service.	Wire.	Tar on Wire.	Core Service.	Stearine Tape.	Brass Tape.	Core.	Total.
AA ²	10·187	4·428	17·313	1's 184·741	1's ·688	1·902	Tar 1·035 1 Compos 4·715	8's 71·893	8's ·455	*5·170 †1·438	(2) ·348	(2) 1·786	(2) 4·536 3·794	314·421
A	9·620	5·201	11·701	1's 184·156	1's 1·170	10·000	4·468	6's 59·259	6's ·183	2·353	·183	·848	2·277 1·982	293·401
E	6·554	4·589	8·526	113·634	·482	...	...	...	...	5·085	·196	·888	2·339 1·840	144·133
B	3·312	2·009	8·278	58·433	·277	...	...	...	...	2·192	·170	·840	2·295 1·901	79·710
B'	3·196	2·889	4·943	38·710	·121	...	...	...	...	1·754	·161	·925	2·259 1·847	56·805
D'	3·455	...	2·948	16·034	1·242	...	...	...	...	1·662	...	...	2·278 1·863	29·482
AA ²	7·609	4·402	13·718	1's 188·247	1's ·939	1·630	2·188	71·991	1·322	*2·808 †1·848	(2) ·435	(2) 1·522	(2) 3·587 3·179	305·425
E	4·239	4·294	7·309	114·258	·588	...	...	...	...	4·547	·199	·560	1·766 1·658	139·418
B	2·989	1·685	6·726	58·646	·294	...	...	...	...	1·775	·203	·779	1·794 1·590	76·481
D'	2·219	...	2·150	15·161	1·735	...	...	...	...	1·389	...	...	1·794 1·619	26·067

* Core Service.

† Wormings.

MECHANICAL DATA.

GUAM-MANILA SECTION.

Type.	Sheathing.	Core.	Wormings.	Lay of Cores (inches).	Breaking Strain of Cable (cwts.)	Elongu. of Cable %	Core Service.	Outer Service.	Lay of Wire (inches).	Lay of Outer Service (inches).	WIRE TESTS.						DIAMETERS.					WEIGHT OF CABLE PER NAUT. (Cwts.)			WEIGHT PER NAUT (Cwts.) (Dry.)													
											Diameter (inches).	Breaking Strain (lbs.)	Elongu. %	Wrsp or Twists in 6".	Breaking Strain per sq. in. (tons).	No. of Samples.	Conductor.	Core.	Served Core.	Over Wire.	Complete Cable.	WEIGHT OF CABLE PER NAUT. (Cwts.)			2 Outer Services	Tar on 2 Outer Services.	2 Compos.	Wire.	Tar on Wire.	Inter-mediate Service.	Tar on Inter-mediate Service.	Wire.	Tar on Wire.	Core Service.	Stearine Tape.	Brass Tape.	Core.	Total.
																						Air.	Water.	Shipping.														
AA ²	14/1 18/8 yarn	2 250 200 Ct. Bt.	each 4 1/180 laid up	9-0	...	...	Intermediate 16 1/120	30 4/28 30 3/28	8's 16-0 1's 17-0	8-0 8-0	1654 2092	1,510 4,583	15-4 ...	19-9 11-0	33-1 29-9	30 (8's) 90 (1's)	1183	3330	1-034	1-859	2-252	322-35	237-40	329-87	10-187	4-428	17-313	1's 184-741	1's 1-688	1-902	Tar 1-035 1 Compos 4-715	8's 71-893	8's 4-55	*5-170 †1-438	(2) 348	(2) 1-786	(2) 4-536 3-794	314-421
A	14/1 10/6 yarn	250 200 Ct. Bt.	...	...	...	...	Intermediate 18 1/180	30 4/28 30 3/28	18-0	8-0 7-75	2092	4,583	...	11-0	29-9	90	1183	3330	B/A 1-437	1-814	2-156	295-00	222-04	308-39	9-620	5-201	11-701	1's 184-156	1's 1-170	10-000	4-468	6's 59-259	6's 1-183	2-353	1-83	848	2-277 1-982	293-401
E	10/2 yarn	250 200 Ct. Bt.	...	...	...	...	12 1/180	30 1/75 28 25	14-9	6-9 6-3	2798	4,003	17-0	11-5	29-9	90	1183	3330	805	1-256	1-517	151-25	106-80	156-25	6-554	4-589	8-526	113-634	482	...	...	...	...	5-085	1-96	888	2-339 1-840	144-133
B	10/6 yarn	250 200 Ct. Bt.	...	...	...	...	9/1/120 & 3/1/180	28 1/50 26 25	12-0	5-5 5-4	1985	2,174	15-6	16-3	32-7	53	1183	3330	565	912	1-159	81-05	56-3	84-09	3-312	2-009	8-278	58-433	277	...	...	...	...	2-192	1-70	840	2-295 1-901	79-710
B'	12/9 yarn	250 200 Ct. Bt.	...	...	...	...	11 1/180	26 1/50 24 25	12-0	5-5 5-8	1485	1,243	17-5	21-3	33-9	270	1183	3330	540	805	1-024	58-09	38-42	60-23	3-196	2-889	4-943	38-710	121	...	...	...	...	1-754	1-61	925	2-259 1-847	56-805
D'	16/14 ¹ E.W.T.	250 200 Ct. Plain	...	...	151	4-9	11 1/120	2 Tapes	10-4	...	0826	1,066	7-4	3 x 3	95-6	2,640	1183	3330	536	701	891	31-19	17-73	31-91	3-455	...	2-948	16-034	1-242	...	...	...	...	1-662	...	...	2-278 1-863	29-482

MANILA-SHANGHAI SECTION.

AA ²	14/1 18/8 yarn	2 200/180 Bt.	each 6 1/135 laid up	11-33	...	...	21 1/105	Over 1's 30 3/25 24 Over 8's 27 3/18	1's 15-2 8's 13-1	Outer 4-5 4-5 Intermed. 6-4	2995 1650	4,484 1,512	...	12-8 22-3	29-2 33-2	175 (1's) 64 (8's)	1146	3113	907	1-766	2-092	309-73	235-11	315-22	7-609	4-402	13-718	1's 188-247	1's 1-939	1-630	2-188	71-991	1-322	*2-808 †1-848	(2) 435	(2) 1-522	(2) 3-587 3-179	305-425
E	10/2 yarn	200/180 Bt.	...	...	...	...	12/11 1/180	20 18 3/25	13-87	3-75 4-2	2792	4,043	21-1	13-2	30-3	435	1146	3113	827	1-220	1-435	142-77	104-46	145-38	4-239	4-294	7-309	114-258	588	...	...	...	...	4-547	1-99	560	1-766 1-658	139-418
B	10/6 yarn	200/180 Bt.	...	...	...	...	13 1/105	19 17 3/18	10-75	3-6 3-9	1996	2,243	21-0	17-7	33-3	1,249	1146	3113	540	870	1-083	77-89	55-22	79-70	2-989	1-685	6-726	58-646	294	...	...	...	...	1-775	2-03	779	1-794 1-590	76-481
D'	15/14 ¹ E.W.T.	200/180	...	...	147-8	5-6	12 1/105	2 Tapes 2 7/8 2 3/4	10-7	..	0827	1,120	8-9	3 x 3	100-2	438	1146	3113	497	666	799	27-591	16-023	28-637	2-219	...	2-150	15-161	1-735	...	...	...	...	1-389	...	...	1-794 1-619	26-067

* Core Service. † Wormings.

Contour Tables

shewing

Depth of Water along Line of
Cables.

EXPLANATION OF CONTOUR TABLES.

Object of Tables.

These Contour Tables show the depth of water along the line of Cable for the several sections belonging to the Company, enabling anyone to very quickly determine the depth of water in which a repair has to be effected without reference to any chart.

Soundings
printed in red,
Cable Lengths in
black.

The Soundings showing the depths in fathoms are printed in red, while the corresponding lengths of Cable between these Soundings are shown in black.

For example, take the case of the Manila-Shanghai Section, page 29. Here, at a distance of 15 cable nauts seawards from Manila Cable House, the depth of water is 18 fathoms; between this Sounding and the next of 45 fathoms there is a length of 24 nauts of Cable. The next Sounding obtainable is only an approximate one of 150 fathoms at a distance of 12 cable nauts still further seawards along the line of Cable, and so on.

Letters against
Soundings.

Where, as is usually the case, no letter is placed against the Sounding, it shows that the Chart Sounding is quite close to the line of Cable, or that all Soundings in the vicinity are approximately the same, so that the one given can be taken as indicating the correct depth.

The letter “*a*” placed against a Sounding indicates that it is an approximate one only, the depth *on* the line of Cable being estimated from Soundings *somewhat in the vicinity*.

The letter “*b*” placed against a Sounding shows the depth given is still more approximate, being estimated from Soundings some considerable distance away from the line of Cable.

The letter “*c*” placed against a Sounding indicates that it is a “no bottom” one, the actual depth being greater than that shown by the Sounding.

The letter “*d*” placed below any two Soundings indicates that they do not probably show the correct contour for points *intermediate* between those two Soundings.

For example, in the case of the Honolulu-Midway Section, there is a length of 43 cable nauts between the Chart Soundings of 1,400_a and 1,872 fathoms (at 52-95 cable nauts respectively from Honolulu Cable House) where the letter “*d*” indicates that the depth between the soundings is doubtful.

In the case of the *shallow water near shore ends* only one or two of the many Chart Soundings are shown in these tables, but in the case of the *deeper water* all Soundings are, as a rule, shown in order to make the contour as complete as possible.

Soundings for
Deep and Shal-
low Water.

Where, in the shallow water, the horizontal line dividing any two Soundings is a wavy one (~~~) it indicates that the change of depth from the one Sounding to the other does not take place regularly. Thus, in the case of the Manila-Shanghai Section, page 29, line 8, there is a length of 579.5 nauts of Cable from the Sounding of 50 fathoms to Shanghai Cable House, the wavy line indicating that the change in depth along this line does not take place regularly, varying up and down in places, but always between these limiting values.

Wavy Line sepa-
rating Soundings

The running totals shown in the column headed “Total Nauts Cable” give the total length of cable as measured from the first station of the section, the last total being, of course, the total length of the whole cable.

Column for
“Total Nauts
Cable.”

At the end of each horizontal line one space is left blank for convenience in making alterations or additions due to future repairs.

Spaces in each
line.

CONTOUR TABLES.

SECTION.	SOUNDINGS IN FATHOMS.					TOTAL NAUTS CABLE.
	NAUTS OF CABLE.					
SAN FRANCISCO (C.H.)	<u>0</u> 10	<u>10</u> 34	<u>34</u> 100	<u>100</u> 150	<u>150</u> 830	45
	6	12	12	5	10	
	<u>830</u> <u>1600_a</u>	<u>1600_a</u> <u>2100_a</u>	<u>2100_a</u> <u>2370_a</u>	<u>2370_a</u> <u>2529</u>	<u>2529</u> <u>2543</u>	235
	32	20	44	53	41	
	<u>2543</u> <u>2571</u>	<u>2571</u> <u>2538</u>	<u>2538</u> <u>2630</u>	<u>2630</u> <u>2666</u>	<u>2666</u> <u>2689</u>	412
	33	33	42	20	49	
	<u>2689</u> <u>2701</u>	<u>2701</u> <u>2768</u>	<u>2768</u> <u>2788</u>	<u>2788</u> <u>2895</u>	<u>2895</u> <u>2772</u>	559
	43	20	20	35	29	
	<u>2772</u> <u>2793</u>	<u>2793</u> <u>2700</u>	<u>2700</u> <u>2685</u>	<u>2685</u> <u>2520</u>	<u>2520</u> <u>2667</u>	711
	34	32	37	26	23	
<u>2667</u> <u>2200_a</u>	<u>2200_a</u> <u>2600</u>	<u>2600</u> <u>2600</u>	<u>2600</u> <u>2590</u>	<u>2590</u> <u>2908</u>	900	
34	46	22	55	32		
<u>2908</u> <u>2430</u>	<u>2430</u> <u>2547</u>	<u>2547</u> <u>2597</u>	<u>2597</u> <u>2481</u>	<u>2481</u> <u>2652</u>	1101	
30	44	45	35	47		
<u>2652</u> <u>2682</u>	<u>2682</u> <u>2684</u>	<u>2684</u> <u>2759</u>	<u>2759</u> <u>2724</u>	<u>2724</u> <u>2652</u>	1300	
41	38	39	50	31		
<u>2652</u> <u>2652</u>	<u>2652</u> <u>2685</u>	<u>2685</u> <u>2517</u>	<u>2517</u> <u>2821</u>	<u>2821</u> <u>2794</u>	1532	
38	39	57	46	52		

NOTE. -a=approximate, b=very approximate, c="No bottom" soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

19

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.						TOTAL NAUTS CABLE.
HONOLULU (Капуа с.н.) ...	<u>2794</u> 2884 40	<u>2884</u> 2904 37	<u>2904</u> 2950 36	<u>2950</u> 2882 32	<u>2882</u> 2893 37		1714
	<u>2893</u> 2941 41	<u>2941</u> 2934 37	<u>2934</u> 2910 40	<u>2910</u> 3000 _a 61	<u>3000_a</u> 2994 23		1916
	<u>2994</u> 2810 30	<u>2810</u> 2620 39	<u>2620</u> 2420 56	<u>2420</u> 2470 29	<u>2470</u> 2426 39		2109
	<u>2426</u> 2700 _a 41	<u>2700_a</u> 2800 _a 16	<u>2800_a</u> 2868 11	<u>2868</u> 2612 18	<u>2612</u> 1951 _a 13		2208
	<u>1951_a</u> 2000 _b 9	<u>2000_b</u> 1500 _b 8	<u>1500_b</u> 454 _d 14	<u>454</u> 305 15	<u>305</u> 357 6		2260
	<u>357</u> 284 13.5	<u>284</u> 264 2.0	<u>264</u> 0 0.8				2276.3

NOTE.--a=approximate, b=very approximate, c="No bottom" soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.						TOTAL NAUTS CABLE.
HONOLULU ... (Капуа с.н.)	0 50	50 238	238 293	293 206	206 1200 _a		25
	1	2	7	6	9		
	1200 _a 1400 _a	1400 _a 1872	1872 1936	1936 2400 _a	2400 _a 2586		172
	27	43	43	14	20		
	2586 2364	2364 2704	2704 2664	2664 2644	2644 2704		242
	19	14	13	10	14		
	2704 2652	2652 2724	2724 2572	2572 2466	2466 2432		313
	16	14	15	13	13		
	2432 2453	2453 2471	2471 2435	2435 2574	2574 2671		372
	6	12	12	14	15		
	2671 2706	2706 2726	2726 2739	2739 2750	2750 2740		451
	13	15	14	15	22		
	2740 2725	2725 2721	2721 2760 _a	2760 _a 2730	2730 2710		565
	18	19	31	26	20		
	2710 2695	2695 2748	2748 2702	2702 2731	2731 2706		670
	23	23	20	22	17		
	2706 2666	2666 2620	2620 2555	2555 2466	2466 2562		740
	20	9	10	19	12		

NOTE.—a=approximate, b=very approximate, c="No bottom" soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

21

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.						TOTAL NAUTS CABLE.
MIDWAY (office)...	$\frac{2562}{2430_a}$	$\frac{2430_a}{2510}$	$\frac{2510}{2504}$	$\frac{2504}{2480_a}$	$\frac{2480_a}{2564}$		855
	19	20	19	32	25		
	$\frac{2564}{2535}$	$\frac{2535}{2593}$	$\frac{2593}{2684_a}$	$\frac{2684_a}{2715_a}$	$\frac{2715_a}{2732}$		972
	22	24	30	26	15		
	$\frac{2732}{2780_a}$	$\frac{2780_a}{2765}$	$\frac{2765}{2919}$	$\frac{2919}{2873}$	$\frac{2873}{2898}$		1068
	24	22	22	10	18		
	$\frac{2898}{2940}$	$\frac{2940}{3035}$	$\frac{3035}{3000_a}$	$\frac{3000_a}{2838}$	$\frac{2838}{2600}$		1182
	32	22	7	33	20		
	$\frac{2600}{2679}$	$\frac{2679}{2633}$	$\frac{2633}{2700_a}$	$\frac{2700_a}{2757}$	$\frac{2757}{2539}$		1295
	43	38	19	9	4		
	$\frac{2539}{2473}$	$\frac{2473}{1800_a}$	$\frac{1800_a}{741_a}$	$\frac{741_a}{1588}$	$\frac{1588}{1248}$		1324.5
	6	7	5	10	1.5		
	$\frac{1248}{162}$	$\frac{462}{60}$	$\frac{60}{0}$				1332
	2.0	1.0	4.5				

NOTE.—*a*=approximate, *b*=very approximate, *c*=“No bottom” soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.					TOTAL NAUTS CABLE.
MIDWAY (office)...	0 100 5	100 470 2	470 1268 2.5	1268 1595 2	1595 1740 2.5	14
	1740 1624 5	1624 2311 9	2311 2539 14	2539 2462 14	2462 2437 15	71
	2437 2772 20	2772 2895 20	2895 2915 19	2915 2945 16	2945 2956 11	157
	2956 2948 10	2948 2960 11	2960 2967 12	2967 2959 10	2959 2982 13	213
	2982 2982 10	2982 2993 9	2993 3012 11	3012 3048 12	3048 3046 10	265
	3046 3000 10	3000 2961 11	2961 2949 10	2949 3188 12	3188 3003 12	320
	3003 3035 11	3035 3168 16	3168 3100 14	3100 3188 12	3188 3220 12	385
	3220 3230 11	3230 3232 14	3232 3242 12	3242 3240 13	3240 3260 11	446
	3260 3250 12	3250 3246 9	3246 3244 4	3244 3261 6	3261 3276 10	487

NOTE.—a = approximate, b = very approximate, c = "No bottom" soundings,
d = depth between soundings very doubtful.

CONTOUR TABLES.

23

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.					TOTAL NAUTS CABLE.
	3276 3259 12	3259 3231 11	3231 3199 10	3199 3269 12	3269 3275 11	543
	3275 3245 16	3245 3240 _a 19	3240 _a 3199 12	3199 3200 10	3200 3225 _a 13	613
	3225 _a 3237 9	3237 3258 24	3258 3198 22	3198 3206 17	3206 3196 25	710
	3196 3290 _a 16	3290 _a 3257 12	3257 3253 _a 21	3253 _a 3296 13	3296 3313 12	784
	3313 3274 13	3274 3291 12	3291 3382 12	3382 3313 12	3313 3254 10	843
	3254 3272 11	3272 3242 10	3242 3207 10	3207 3207 11	3207 3176 12	897
	3176 3214 9	3214 3285 12	3285 3275 11	3275 3381 11	3381 2992 12	952
	2992 3217 10	3217 3248 _a 12	3248 _a 3200 _a 11	3200 _a 3200 _a 14	3200 _a 3248 _a 23	1022
	3248 _a 3237 19	3237 3210 23	3210 3110 31	3110 3061 39	3061 3024 _a 35	1169

NOTE.—*a* = approximate, *b* = very approximate, *c* = "No bottom" soundings,
d = depth between soundings very doubtful.

CONTOUR TABLES.

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.					TOTAL NAUTS CABLE.
	$\frac{3024_a}{3090_a}$ 29	$\frac{3090_a}{2873_a}$ 34	$\frac{2873_a}{2770}$ 27	$\frac{2770}{1798_a}$ 40	$\frac{1798_a}{2752}$ 14	1313
	$\frac{2752}{2782_a}$ 19	$\frac{2782_a}{2540_c}$ 30	$\frac{2540_c}{2820}$ 38	$\frac{2820}{2886_b}$ 33	$\frac{2886_b}{3026}$ 25	1458
	$\frac{3020}{3102}$ 13	$\frac{3102}{3121}$ 11	$\frac{3121}{3160}$ 24	$\frac{3160}{3155}$ 20	$\frac{3155}{3159}$ 22	1548
	$\frac{3159}{3130_a}$ 21	$\frac{3130_a}{3220_a}$ 24	$\frac{3220_a}{3168}$ 24	$\frac{3168}{3173}$ 21	$\frac{3173}{3144_a}$ 20	1658
	$\frac{3144_a}{3188}$ 21	$\frac{3188}{3170_a}$ 24	$\frac{3170_a}{3135}$ 26	$\frac{3135}{3164}$ 21	$\frac{3164}{3140_a}$ 10	1760
	$\frac{3140_a}{3120}$ 12	$\frac{3120}{3140}$ 18	$\frac{3140}{3084}$ 9	$\frac{3084}{3080_a}$ 11	$\frac{3080_a}{3065_a}$ 11	1821
	$\frac{3065_a}{3047}$ 9	$\frac{3047}{2977}$ 14	$\frac{2977}{3122_a}$ 19	$\frac{3122_a}{3185}$ 22	$\frac{3185}{3206}$ 13	1898
	$\frac{3206}{3189}$ 9	$\frac{3189}{3191}$ 12	$\frac{3191}{3193}$ 18	$\frac{3193}{3195}$ 10	$\frac{3195}{3197}$ 11	1958
	$\frac{3197}{3195}$ 8	$\frac{3195}{3206}$ 15	$\frac{3206}{3219}$ 9	$\frac{3219}{3200}$ 11	$\frac{3200}{3165}$ 13	2014

NOTE.—*a* = approximate, *b* = very approximate, *c* = "No bottom" soundings,
d = depth between soundings very doubtful.

CONTOUR TABLES.

25

SECTION.	SOUNDINGS IN FATHOMS.					TOTAL NAUTS CABLE.
	NAUTS OF CABLE.					
GUAM (office) ...	<u>3165</u> 2930 13	<u>2930</u> 2757 6	<u>2757</u> 2368 5	<u>2368</u> 2656 3	<u>2656</u> 3030 _a 11	2052
	<u>3030_a</u> 3252 12	<u>3252</u> 3322 10	<u>3322</u> 3377 11	<u>3377</u> 3273 10	<u>3273</u> 3262 11	2106
	<u>3262</u> 3356 10	<u>3356</u> 3205 21	<u>3205</u> 3190 19	<u>3190</u> 3147 18	<u>3147</u> 3143 44	2218
	<u>3143</u> 3166 25	<u>3166</u> 3178 10	<u>3178</u> 2567 11	<u>2567</u> 2537 9	<u>2537</u> 2414 10	2283
	<u>2414</u> 2578 8	<u>2578</u> 2850 _a 7	<u>2850_a</u> 3130 _a 8	<u>3130_a</u> 3350 _a 11	<u>3350_a</u> 3220 _a 9	2326
	<u>3220_a</u> 3360 9	<u>3360</u> 3000 _a 9	<u>3000_a</u> 2850 _a 14	<u>2850_a</u> 2253 17	<u>2253</u> 2559 9	2384
	<u>2559</u> 3200 _a 22	<u>3200_a</u> 2884 16	<u>2884</u> 2568 5	<u>2568</u> 2500 _a 21	<u>2500_a</u> 2515 19	2467
	<u>2515</u> 2342 17	<u>2342</u> 2043 26	<u>2043</u> 911 35	<u>911</u> 500 _a 22	<u>500_a</u> 824 15	2582
	<u>824</u> 1143 10	<u>1143</u> 1091 9	<u>1091</u> 383 _a 2·5	<u>383_a</u> 33 1·0	<u>33</u> 0 2·5	2607

NOTE.— *a* = approximate, *b* = very approximate, *c* = "No bottom" soundings,
d = depth between soundings very doubtful.

CONTOUR TABLES.

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.						TOTAL NAUTS CABLE.
GUAM (office) ...	$\frac{0}{24}$ 2	$\frac{24}{421}$ 1.5	$\frac{421}{1411_a}$ 7	$\frac{1411_a}{2009_a}$ 17.5	$\frac{2009_a}{1376_a}$ 17		45
	$\frac{1376_a}{1820_a}$ 6	$\frac{1820_a}{1862_a}$ 12	$\frac{1862_a}{1946_a}$ 18	$\frac{1946_a}{2310_a}$ 15	$\frac{2310_a}{2648}$ 17		113
	$\frac{2648}{1755}$ $\frac{d}{28}$	$\frac{1755}{1850}$ 16	$\frac{1850}{1977}$ 13	$\frac{1977}{2340}$ 12	$\frac{2340}{2514}$ 12		194
	$\frac{2514}{2591}$ 12	$\frac{2591}{2691}$ 16	$\frac{2691}{2710}$ 14	$\frac{2710}{2740}$ 10	$\frac{2740}{2710}$ 10		256
	$\frac{2710}{2726}$ 11	$\frac{2726}{2726}$ 10	$\frac{2726}{2647}$ 11	$\frac{2647}{2231}$ 13	$\frac{2231}{2212}$ 13		314
	$\frac{2212}{3050_a}$ 12	$\frac{3050_a}{2473}$ 20	$\frac{2473}{2793}$ 23	$\frac{2793}{2476_a}$ 9	$\frac{2476_a}{2351}$ 13		391
	$\frac{2351}{2638}$ 7	$\frac{2638}{2953}$ 8	$\frac{2953}{2797}$ 9	$\frac{2797}{2704}$ 10	$\frac{2704}{2762}$ 22		447
	$\frac{2762}{2751}$ 24	$\frac{2751}{2559}$ 21	$\frac{2559}{3000_a}$ 18	$\frac{3000_a}{2830}$ 25	$\frac{2830}{2862}$ 20		555
	$\frac{2862}{2785}$ 21	$\frac{2785}{2731}$ 12	$\frac{2731}{2891}$ 12	$\frac{2891}{2819}$ 10	$\frac{2819}{2679}$ 10		620

NOTE.—a=approximate, b=very approximate, c="No bottom" soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

27

SECTION.	SOUNDINGS IN FATHOMS.					TOTAL NAUTS CABLE.
	NAUTS OF CABLE.					
	<div>2679 2679</div> <div>10</div>	<div>2679 2462</div> <div>9</div>	<div>2462 1937</div> <div>5</div>	<div>1937 1780</div> <div>6</div>	<div>1780 1560</div> <div>5</div>	655
	<div>1560 1619</div> <div>3</div>	<div>1619 2072</div> <div>9</div>	<div>2072 2487</div> <div>11</div>	<div>2487 2688</div> <div>10</div>	<div>2688 2827</div> <div>14</div>	702
	<div>2827 2950</div> <div>13</div>	<div>2950 2769</div> <div>19</div>	<div>2769 3329</div> <div>19</div>	<div>3329 3253</div> <div>17</div>	<div>3253 3103</div> <div>16</div>	786
	<div>3103 2985_a</div> <div>45</div>	<div>2985_a 2969</div> <div>25</div>	<div>2969 3132</div> <div>18</div>	<div>3132 3204</div> <div>22</div>	<div>3204 3100</div> <div>36</div>	932
	<div>3100 3188</div> <div>33</div>	<div>3188 2965_a</div> <div>26</div>	<div>2965_a 2978_a</div> <div>32</div>	<div>2978_a 2692_a</div> <div>30</div>	<div>2692_a 3100_a</div> <div>28</div>	1081
	<div>3100_a 2720_a</div> <div>31</div>	<div>2720_a 2589_a</div> <div>43</div>	<div>2589_a 3035</div> <div>35</div>	<div>3035 3490</div> <div>32</div>	<div>3490 2200</div> <div>16</div>	1238
	<div>2200 1961</div> <div>16</div>	<div>1961 900</div> <div>21</div>	<div>900 259</div> <div>6</div>	<div>259 30</div> <div>6</div>	<div>30 38</div> <div>5</div>	1292
	<div>38 44</div> <div>9</div>	<div>44 86</div> <div>9</div>	<div>86 56</div> <div>4</div>	<div>56 117_a</div> <div>6</div>	<div>117_a 78</div> <div>7</div>	1327
	<div>78 80</div> <div>3</div>	<div>80 102</div> <div>7</div>	<div>102 102</div> <div>5</div>	<div>102 88</div> <div>5</div>	<div>88 131</div> <div>9</div>	1356

NOTE.—*a*=approximate, *b*=very approximate, *c*=“No bottom” soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.					TOTAL NAUTS CABLE.
MANILA ... (Malate c.H.)	$\frac{131}{521}$ 9	$\frac{521}{281}$ 6	$\frac{281}{395}$ 13	$\frac{395}{450}$ 10	$\frac{450}{454}$ 4	1398
	$\frac{454}{598}$ 3	$\frac{598}{709}$ 4	$\frac{709}{560}$ 12	$\frac{560}{719}$ 6	$\frac{719}{930}$ 4	1427
	$\frac{930}{943}$ 5	$\frac{943}{927}$ 7	$\frac{927}{425}$ 5	$\frac{425}{338}$ 14	$\frac{338}{273}$ 10	1468
	$\frac{273}{109_c}$ 25	$\frac{109_c}{160_a}$ 16	$\frac{160_a}{120_a}$ 6	$\frac{120_a}{163_d}$ 8	$\frac{163_d}{100_a}$ 5	1528
	$\frac{100_a}{110_c}$ 13	$\frac{110_c}{371}$ 10	$\frac{371}{290}$ 14	$\frac{290}{210}$ 10	$\frac{210}{150_a}$ 5	1580
	$\frac{150_a}{50}$ 7	$\frac{50}{30}$ 15	$\frac{30}{0}$ 29.5			1631.5

NOTE.—*a*=approximate, *b*=very approximate, *c*=“ No bottom ” soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

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SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.					TOTAL NAUTS CABLE.
MANILA ... (Malate c.h.)	$\frac{0}{18}$	$\frac{18}{45}$	$\frac{45}{150_a}$	$\frac{150_a}{1470}$	$\frac{1470}{1378}$	109
	15	24	12	17	41	
	$\frac{1378}{1500_a}$	$\frac{1500_a}{1750_a}$	$\frac{1750_a}{2000_a}$	$\frac{2000_a}{2000_b}$	$\frac{2000_b}{2257}$	225
	24	23	22	21	26	
	$\frac{2257}{2200_a}$	$\frac{2200_a}{1655_a}$	$\frac{1655_a}{2164}$	$\frac{2164}{2100}$	$\frac{2100}{1860_a}$	315
	18	18	10	19	25	
	$\frac{1860_a}{2178}$	$\frac{2178}{2300}$	$\frac{2300}{2140_a}$	$\frac{2140_a}{2100}$	$\frac{2100}{1930}$	418
	17	21	25	17	23	
SHANGHAI ... (Pau Shan c.h.)	$\frac{1930}{1650_a}$	$\frac{1650_a}{1787}$	$\frac{1787}{1740}$	$\frac{1740}{1680}$	$\frac{1680}{1820}$	496
	18	12	15	14	19	
	$\frac{1820}{1850}$	$\frac{1850}{1430}$	$\frac{1430}{1100_a}$	$\frac{1100_a}{900}$	$\frac{900}{730}$	594
	21	29	17	16	15	
	$\frac{730}{700}$	$\frac{700}{375}$	$\frac{375}{247}$	$\frac{247}{100}$	$\frac{100}{50}$	685
	7	8	8	8	60	
	$\frac{50}{0}$					1264.5
	579.5					

NOTE.—a=approximate, b=very approximate, c="No bottom" soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.						TOTAL NAUTS CABLE.
GUAM (office) ...	$\frac{0}{66}$ 2.5	$\frac{66}{400}$ 1.5	$\frac{400}{1000}$ 2.5	$\frac{1000}{1327}$ 1.5	$\frac{1327}{1500}$ 3.5		11.5
	$\frac{1500}{1250}$ 3.5	$\frac{1250}{1300_b}$ 9	$\frac{1300_b}{2014}$ 3	$\frac{2014}{2100}$ 9	$\frac{2100}{2100}$ 18		54
	$\frac{2100}{1950_a}$ 11	$\frac{1950_a}{2150_a}$ 11	$\frac{2150_a}{2250}$ 12	$\frac{2250}{2245}$ 8	$\frac{2245}{1847}$ 8		104
	$\frac{1847}{2128}$ 7	$\frac{2128}{2200_a}$ 8	$\frac{2200_a}{1985}$ 4	$\frac{1985}{1959}$ 3	$\frac{1959}{2082}$ 10		136
	$\frac{2082}{2273}$ 2.5	$\frac{2273}{1850}$ 13.5	$\frac{1850}{2365}$ 14	$\frac{2365}{2400}$ 14	$\frac{2400}{2447}$ 9		189
	$\frac{2447}{2000}$ 18	$\frac{2000}{2298}$ 8	$\frac{2298}{2392}$ 2	$\frac{2392}{2189}$ 10	$\frac{2189}{2271}$ 2		229
	$\frac{2271}{2025}$ 10	$\frac{2025}{2314}$ 2.5	$\frac{2314}{2382}$ 9.5	$\frac{2382}{2356}$ 3	$\frac{2356}{2112}$ 10		264
	$\frac{2112}{2091}$ 2	$\frac{2091}{2351}$ 9	$\frac{2351}{2451}$ 3	$\frac{2451}{1990}$ 9	$\frac{1990}{2175}$ 2		289
	$\frac{2175}{2155}$ 9	$\frac{2155}{2022}$ 4	$\frac{2022}{2451}$ 10	$\frac{2451}{2424}$ 2.5	$\frac{2424}{2400_a}$ 11.5		326

NOTE.—*a*=approximate, *b*=very approximate, *c*="No bottom" soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

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SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.					TOTAL NAUTS CABLE.
	2400 _a 2200	2200 2300	2300 2220	2220 2133	2133 1967	
	12	12	9	3	11	373
	1967 1964	1964 2278	2278 2180	2180 2146	2146 2151	401
	2	10	3	10	3	
	2151 1863	1863 2028	2028 2319	2319 2002	2002 1830 _a	436
	10	3	12	3	7	
	1830 _a 1930	1930 1987	1987 2200	2200 2322	2322 2181	458
	5	2.5	7.5	4	3	
	2181 2040	2040 1884	1884 1588	1588 1321	1321 1880 _a	492
	11	3	11	3	6	
	1880 _a 2209	2209 1700 _a	1700 _a 1600	1600 1800	1800 1620	537
	9	16	7	8	5	
	1620 1215	1215 1053	1053 1330 _a	1330 _a 1532	1532 1400 _a	573
	9	5	6	10	6	
	1400 _a 2023	2023 2122	2122 2350 _a	2350 _a 2548	2548 2582	625
	11	10	9	10	12	
	2582 2588	2588 2322	2322 2368	2368 2744	2744 2673	682
	11	12	12	11	11	

NOTE.—*a*=approximate, *b*=very approximate, *c*="No bottom" soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.					TOTAL NAUTS CABLE.
BONIN (office) ...	2673 2400 6.5	2400 2368 4.5	2368 1820 _a 5	1820 _a 1774 5	1774 1765 8	711
	1765 1900 _a 8	1900 _a 2095 4	2095 2065 6	2065 2355 6	2355 2482 11	746
	2482 1755 12	1755 1800 _a 10	1800 _a 1740 13	1740 1602 10	1602 1607 6	797
	1607 1450 5	1450 1553 5	1553 1554 5	1554 1770 5	1770 1900 6	823
	1900 1525 8	1525 1543 12	1543 1438 7	1438 1180 6	1180 1050 _a 6	862
	1050 _a 998 3	998 862 3	862 571 7	571 396 5	396 426 2	882
	426 316 4	316 102 2	102 85 4	85 63 2	63 0 5	899

NOTE.—a = approximate, b = very approximate, c = "No "bottom" soundings,
d = depth between soundings very doubtful.

CONTOUR TABLES.

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SECTION.	<div>SOUNDINGS IN FATHOMS.</div> <div>NAUTS OF CABLE.</div>						TOTAL NAUTS CABLE.

NOTE.—*a* = approximate, *b* = very approximate, *c* = "No bottom" soundings
d = depth between soundings very doubtful.

NOTE.—*a*=approximate, *b*=very approximate, *c*="No bottom" soundings,
d=depth between soundings very doubtful.

NOTE.—*a*=approximate, *b*=very approximate, *c*="No bottom" soundings,
d=depth between soundings very doubtful.

CONTOUR TABLES.

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SECTION.	SOUNDINGS IN FATHOMS. NAUTS OF CABLE.					TOTAL NAUTS CABLE.

NOTE.—*a* = approximate, *b* = very approximate, *c* = "No bottom" soundings
d = depth between soundings very doubtful.

CONTOUR TABLES.

[illegible]

NOTE.—*a*=approximate, *b*=very approximate, *c*="No bottom" soundings,
d=depth between soundings very doubtful.

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